IN THE CLAIMS:

Please cancel claims 36, 51-54 and 56-68 without prejudice and amend claims 35, 37-50 and 55 as follows:

35. (currently amended) Electric machine with a rotor ~~(3, 53)~~ and a stator ~~(7, 57)~~, in which electric coils ~~(6, 56)~~ and permanent magnets ~~(5)~~ are ~~located~~ **disposed** which influence each other when the rotor revolves, ~~where the rotor (3, 53) contains the~~ **wherein said permanent** magnets ~~(5)~~ **are cylindrical and are disposed tangentially on a circumference of said rotor, and the stator contains the coils (6, 56)** and ~~the~~ **said electric** coils ~~(6, 56)~~ do not have an iron core and at least one section of ~~the~~ **said electric** coils extends transversely across ~~the~~ **said** circumference of ~~the~~ **said** rotor, wherein ~~the~~ **said electric** coils ~~(6, 56)~~ are fitted in ~~the~~ **said** stator ~~(7, 57)~~ individually and are bent ~~in such a way~~ **so** that they extend on both **axial** sides of ~~the~~ **said** rotor ~~(3, 53)~~ and ~~enclose the~~ **surround said permanent** magnets ~~(5)~~ located in ~~the~~ **said** rotor ~~to a large extent~~.

36. (cancelled)

37. (currently amended) Electric machine according to claim 35, wherein ~~the~~ **said** permanent magnets ~~(5)~~ are ~~attached~~ **coupled** to ~~the~~ **said** rotor ~~(3)~~ via support elements ~~(4)~~.

38. (currently amended) Electric machine according to claim 35, wherein ~~the~~ said electric coils ~~(6)~~ have a Ω-shaped cross-section and ~~the~~ said permanent magnets ~~(5)~~ are immediately next to ~~the~~ an inside of ~~the~~ said electric coils.

39. (currently amended) Electric machine according to claim 35, wherein ~~the~~ support elements ~~(4)~~ for ~~the~~ said permanent magnets ~~(5)~~ are attached to ~~the~~ said rotor ~~(3)~~ in such a way that they can be replaced.

40. (currently amended) Electric machine according to claim 35, ~~wherein~~ further comprising an interlocking facility ~~(73) is provided~~ between ~~the~~ said permanent magnets ~~(5) and/or~~ and their support elements ~~(4)~~ and ~~the~~ said rotor ~~(3), preferably~~ in ~~the~~ a radial direction.

41. (currently amended) Electric machine according to claim 35, wherein ~~the~~ said permanent magnets ~~(5) and/or~~ and their support elements ~~(4)~~ are attached to ~~the~~ said rotor ~~(3)~~ so that they can be removed in ~~the~~ an axial direction.

42. (currently amended) Electric machine according to claim 35, ~~wherein the~~ further comprising connections ~~(8)~~ for ~~the~~ said

coils ~~(5, 56) are located~~ disposed so that they are accessible individually on ~~the~~ said stator ~~(7, 57)~~.

43. (currently amended) Electric machine according to claim 35, wherein ~~the~~ said permanent magnets ~~(5) located~~ are arranged so that successive permanent magnets ~~behind each other~~ have different polarities ~~polarity in each case~~.

44. (currently amended) Electric machine according to claim 35, ~~wherein~~ further comprising a pole reversal device ~~is provided~~ disposed in ~~the~~ a supply line to ~~the~~ said electric coils ~~(6, 56)~~.

45. (currently amended) Electric machine according to claim 35, wherein ~~the~~ said coil ~~(6, 56)~~ is annular and profiles of ~~the~~ said rotor ~~(3, 5, 53)~~ and ~~the~~ said coil are adapted to each other.

46. (currently amended) Electric machine according to claim 35, wherein several rotors ~~(3, 53)~~ and coil configurations are located behind each other in ~~the~~ an axial direction of the machine.

47. (currently amended) Electric machine according to claim 35, wherein at least two machines preferably in the form of motors with different diameters are located behind each other on a mutual machine shaft ~~(2, 52)~~.

48. (currently amended) Electric machine according to claim 35, wherein ~~the~~ said coils ~~(6)~~ are formed from several coils that are only one wire layer thick ~~in each case~~.

49. (currently amended) Electric machine according to claim 48, wherein ~~the~~ connections for the individual coils are wired individually and are ~~in particular~~ designed ~~so that they can~~ to be connected in series ~~and/or~~ and parallel.

50. (currently amended) Electric machine according to claim 48, wherein ~~the~~ said individual coil layers are ~~in particular~~ glued together with an adhesive that conducts heat effectively.

51. (cancelled)

52. (cancelled)

53. (cancelled)

54. (cancelled)

55. (currently amended) Electric machine according to claim 35, ~~wherein~~ further comprising a cable support ~~(10) is provided~~ on ~~the~~ a circumference of the rotor - stator assembly.

56. (cancelled)

57. (cancelled)

58. (cancelled)

59. (cancelled)

60. (cancelled)

61. (cancelled)

62. (cancelled)

63. (cancelled)

64. (cancelled)

65. (cancelled)

66. (cancelled)

67. (cancelled)

68. (cancelled)